Lamont County

Information for Wind Energy Development

Planning & Development Department 5303 –50 Avenue, Lamont, Alberta T0B 2R0 Phone (780) 895-2233 Fax (780) 895-7404

Definition: "**wind energy conversion system**" means one or more buildings designed to convert wind energy into mechanical or electrical energy;

6.28 Wind Energy Conversion Systems

1. In this Section, the following definitions shall apply:

   (a) "blade" means an element of a wind energy conversion system rotor, which acts as a single airfoil, thereby extracting kinetic energy directly from the wind;
   (b) "blade clearance", in reference to a horizontal axis rotor, means the distance from grade to the bottom of the rotor's arc;
   (c) "horizontal axis rotor" means a wind energy conversion system, typical of conventional or traditional windmills;
   (d) "rotor's arc" means the largest circumferential path traveled by a wind energy conversion system blade;
   (e) "total height" means the height from grade to the highest vertical extension of a wind energy conversion system. In the case of a system with a horizontal axis rotor, total height includes the distance from grade to the top of the tower, plus the distance from the top to the highest point of the rotor's arc;
   (f) "tower" means the structure which supports the rotor above grade; and
   (g) "vertical axis rotor" means a wind energy conversion system where the rotor is mounted on an axis perpendicular to the earth's surface.

2. Prior to making a decision on an application for a development permit for a wind energy conversion system, the Development Authority shall consider input from:

   (a) any adjacent municipality should the proposed development be located within 2 km (1.2 miles) of the municipality; and
   (b) landowners within 2 km (1.2 miles) of the proposed development.

3. Should a wind energy conversion system discontinue producing power for a minimum of two (2) years, the system operator shall be required to provide a status report to the Development Authority. The Development Authority may then require that the system be decommissioned. Failure to comply with a decommissioning requirement shall be considered to be a breach of this Bylaw, and subject to the enforcement provisions of Section 5.1 of this Bylaw.

4. A wind energy conversion system shall comply with all the setbacks related to roads and highways that govern the principal use in the District in which it is located.

5. Where, in the opinion of the Development Authority, the setbacks referred to in Section 6.28.4 above are not sufficient to reduce the impact of a wind energy conversion system from a road or highway, the Development Authority may increase the required setback.

6. A wind energy conversion system shall be located not less than four (4) times the total height of the system from a dwelling on another parcel of land.

7. A wind energy conversion system shall be located so that the horizontal distance measured at grade from the outside of the rotor arc to any lot boundary other than a road or highway is at least 7.5 m (24.6 ft.).

8. In the case of wind energy conversion system, setbacks may be amended from the minimum setback requirements in the Land Use District in which the system is located depending upon the number of systems in a group and the proximity of the system to any existing dwelling.

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9. The minimum vertical blade clearance from grade shall be 7.4 m (24.6 ft.) for a wind energy conversion system employing a horizontal axis rotor unless otherwise required by the Development Authority.

10. To ensure public safety, the Development Authority may require that:

    (a) a secure fence not less than 1.8 m (5.9 ft.) in height with a lockable gate surround a wind energy conversion system tower if the tower is climbable or subject to vandalism that could threaten tower integrity;
    (b) no ladder or permanent tower access device be located less than 3.7 m (12.1 ft.) from grade;
    (c) a locked device be installed on the tower to preclude access to the top of the tower; and
    (d) such additional safety mechanisms or procedures be provided as the Development Authority may consider reasonable and appropriate.

    The use of tubular towers, with locked door access, may, at the sole discretion of the Development Authority, make unnecessary the above requirements.

11. All power lines on the site of an wind energy conversion system to the power grid or a power substation will be underground except where the Development Authority specifically approves overhead or above grade installations.

12. Unless otherwise required by the Development Authority, a wind energy conversion system shall be finished in a non-reflective matte and in a colour which minimizes the obtrusive impact of a system to the sole requirements of the Development Authority.

13. No lettering, advertising or other symbol shall appear on the towers or blades. On other parts of the wind energy conversion system, the only lettering or symbol allowed will be the manufacturer's and/or owner's identification or symbol and then, only upon the approval of and at the sole discretion of the Development Authority.

14. The Development Authority may approve a wind energy conversion system on a case-by-case basis having regard for:

    (a) information provided in the application;
    (b) the proximity of the proposed development to other land uses;
    (c) the cumulative effect of all wind energy conversion systems approved or proposed in the area;
    (d) underlying utilities; and
    (e) information received from the circulation of the application and from the public.

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A development permit application is required for wind energy systems as follows:

- Residential development permit – Personal use only
- Commercial development permit – Use for on site only commercial use.
- Industrial development permit – Industrial use.

For any development abutting a public highway contact Alberta Transportation for setback requirements. Government rite # 310-0000, then at the prompt put in the following phone number 780-853-8178.

Please note: This information has no legal status and cannot be used as an official interpretation of the various regulations currently in effect. **Users are advised to refer to the Land Use Bylaw 675/07 and Municipal Development Plan 674/07 which are posted on our website at www.countylamont.ab.ca or contact the County Planning Department (780)895-2233 for more information.** Lamont County accepts no responsibility for persons relying solely on this information.